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EXAMINER

NORTON, JENNIFER L

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/801,195	<b>Applicant(s)</b> ARMSTRONG ET AL.	
	<b>Examiner</b> Jennifer L. Norton	<b>Art Unit</b> 2121	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 28 April 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-44 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-44 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 October 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. The following is a **Final Office Action** in response to the Amendment received on 28 April 2008. Claims 1-44 are pending in this application.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

3. Claims 1, 2, 4, 5, 7-10, 15, 17, 19, 22-25, 27, 28, 30-34, 36, 42 and 43 are rejected under 35 U.S.C. 102(a) as being anticipated by U.S. Patent Publication No. 2002/0077711 (hereinafter Nixon).

4. As per claim 1, Nixon discloses a remote data viewing system for use in a process plant having a plurality of data source applications, each of which collects or generates entity data pertaining to one or more different entities within the process plant, the remote data viewing system comprising:

a primary data collection platform (pg. 5, par. [0040]; i.e. XML) adapted to collect the entity data pertaining to the one or more different entities within the process plant from the data source applications (pg. 5, par. [0040]; i.e. each data originator), wherein two or more of the plurality of data source applications each includes a data source display application that presents the entity data in different viewing formats (pg.

5, par. [0040] and pg. 11, par. [0069]; i.e. each of the different schemas from each data originator);

a database (Fig. 2, element 102) adapted to store the entity data pertaining to the one or more different entities within the process plant collected by the primary data collection platform (pg. 5, par. [0041], pg. 8, par. [0054] and 13, par. [0082]);

a web server (i.e. XML data server) coupled to the primary data collection platform (pg. 5, par. [0040]) and adapted to provide remote access to the entity data stored in the database at one or more remote platforms (pg. 12, par. [0076] and pg. 13, par. [0083]); and

a display application (pg. 6, par. [0042] and [0043]; i.e. user display applications of Fig. 2, element 50) stored on a computer readable memory (pg. 20, par. [0124]) and adapted to be executed on a processor within one of the one or more remote platforms to create a display for the entity data (pg. 6, par. [0043], pg. 12, par. [0075] and pg. 20, par. [0124]), the display including a navigational tree (pg. 14, par. [0088], pg. 15, par. [0095] and Fig. 5; i.e. a set or series of hierarchical displays) having a plurality of sections specifying different categories of entity data (pgs. 14-15, par. [0092]) in the database (pg. 14, par. [0094] and pg. 20, par. [0126]) and a display view (Fig. 5A and 5B), wherein the display application enables a user to select the different ones of the sections of the navigational tree to specify different entity data to be displayed and presents the entity data associated with a selected section of the navigational tree in the display view (pgs. 14-15, par. [0088], [0092] and [0094] and pg. 20, par. [0126])

and [0127]) in a predetermined viewing format (i.e. common manner/consistent format), wherein the predetermined viewing format is a common display format for presenting entity data associated with each of the plurality of sections specifying the different entity data to be displayed (pg. 11, par. [0069] and pg. 15, par. [0095] and par. [0096]).

5. As per claim 2, Nixon discloses the predetermined viewing format organizes the entity data based on device tags (i.e. indexes) associated with the entity data (pg. 7, par. [0048], pg. 11, par. [0068], pg. 15, par. [0096] and [0098], pg. 20, par. [0126] and [0127] and Fig. 5A and 5B).

6. As per claim 4, Nixon discloses the predetermined viewing format includes a display of configuration data (i.e. the interconnections of process control equipment) associated with the device tags (pg. 20, par. [0126]).

7. As per claim 5, Nixon discloses the predetermined viewing format includes a display of calibration data (pg. 7, par. [0052]) associated with the device tags (pg. 20, par. [0126]).

8. As per claim 7, Nixon discloses the navigational tree includes a section specifying one or more plant locations (Fig. 5A, element "Area 1" and "Area 2") associated with

the entity data within the process plant (pg. 6, par. [0044], pg. 14, par. [0088], pg. 15, par. [0096] and pg. 20, par. [0126]).

9. As per claim 8, Nixon discloses the navigational tree includes a section specifying one or more physical networks (Fig. 5A, element "Area 1" and "Area 2") associated with the entity data within the process plant (pg. 6, par. [0044], pg. 14, par. [0088], pg. 15, par. [0096], pg. 20, par. [0126]).

10. As per claim 9, Nixon discloses the navigational tree includes a section specifying alerts (Fig. 5) associated with the entity data within the process plant (pg. 7, par. [0052], pg. 14, par. [0088], and pg. 15, element [0096]).

11. As per claim 10, Nixon discloses the navigational tree includes a section specifying calibration entities (pg. 7, par. [0052]) associated with the entity data within the process plant (pg. 20, par. [0126]).

12. As per claim 15, Nixon discloses the navigational tree includes a section specifying user defined favorite data associated with the entity data within the process plant (pg. 7, par. [0048]).

13. As per claim 17, Nixon discloses the navigational tree includes a section specifying device tags (i.e. indexes) associated with the entity data within the process plant (pg. 7, par. [0048], pg. 11, par. [0068], pg. 15, par. [0096] and [0098], pg. 20, par. [0126] and [0127] and Fig. 5A and 5B).

14. As per claim 19, Nixon discloses the web server includes a first application that acquires the entity data from the primary data collection platform as XML data (pg. 13, par. [0083]) and includes a second application that places the XML data into a web page (pg. 20, par. [0125]) using the predefined viewing format (pg. 13, par. [0084]).

If, however the prior art is interpreted differently by a third party, the base reference and secondary reference teach "the web server includes a first application that acquires the entity data from the primary data collection platform as XML data and includes a second application that places the XML data into a web page using the predefined viewing format" as follows:

Claim 19 is rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Nixon in view of U.S. Patent Publication No. 2004/0230897 (hereinafter Latzel).

As per claim 19, Nixon teaches to the web server substantially the same as claimed but does not expressly the web server includes a first application that acquires the entity data from the primary data collection platform as XML data and includes a

second application that places the XML data into a web page using the predefined viewing format.

Latzel teaches to the web server includes a first application that acquires the entity data from the primary data collection platform as XML data and includes a second application that places the XML data into a web page using the predefined viewing format (pg. 3, par. [0043]).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify the teaching of Nixon to include a web server that includes a first application that acquires the entity data from the primary data collection platform as XML data and includes a second application that places the XML data into a web page using the predefined viewing format to conveniently edit and generate web sites, and provide simplified automated editing of web sites, requiring less technical expertise (pg. 1, par. [0006]).

15. As per claim 22, Nixon discloses the web server includes an application that acquires event data from the primary data collection platform in response to a request from one of the remote platforms (pg. 13, par. [0083] and pg. 20, par. [0125]), places the acquired event data into a web page (pg. 20, par. [0125]) using the predetermined viewing format and sends the web page to the one of the remote platforms (pg. 13, par. [0084]).



If, however the prior art is interpreted differently by a third party, the base reference and secondary reference teach "the web server includes an application that acquires event data from the primary data collection platform in response to a request from one of the remote platforms, places the acquired event data into a web page using the predetermined viewing format and sends the web page to the one of the remote platforms" as follows:

Claim 22 is rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Nixon in view of Latzel.

As per claim 22, Nixon teaches the web server substantially the same as claimed but does not expressly teach the web server includes an application that acquires event data from the primary data collection platform in response to a request from one of the remote platforms, places the acquired event data into a web page using the predetermined viewing format and sends the web page to the one of the remote platforms.

Latzel teaches the web server includes an application that acquires event data from the primary data collection platform in response to a request from one of the remote platforms, places the acquired event data into a web page using the predetermined viewing format and sends the web page to the one of the remote platforms (pg. 3, par. [0043]).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify the teaching of Nixon to include the web server includes an application that acquires event data from the primary data collection platform in response to a request from one of the remote platforms, places the acquired event data into a web page using the predetermined viewing format and sends the web page to the one of the remote platforms to conveniently edit and generate web sites, and provide simplified automated editing of web sites, requiring less technical expertise (pg. 1, par. [0006]).

16. As per claim 23, Nixon discloses the navigational tree includes multiple sections (pgs. 14-15, par. [0088] and [0092]; e.g. Fig. 5, element "Areas"), wherein each of the multiple sections specifies a different category of entity data (pgs. 14-15, par. [0092]; e.g. Fig. 5, element "Units") and wherein each of the multiple sections includes one or more associated predetermined viewing formats (pg. 11, par. [0069]) used to view the entity data when selected by a user (pg. 15, par. [0094] and pg. 20, par. [0125]-[0127]).

17. As per claim 24, Nixon discloses a method of viewing entity data generated in a process plant having a plurality of data source applications, each of which collects or generates entity data pertaining to one or more different entities within the process plant, the method comprising:

collecting the entity data pertaining to the one or more entities within the process plant at a primary data collection platform (pg. 5, par. [0040]; i.e. XML) from the plurality of data source applications (pg. 5, par. [0040]; i.e. each data originator), wherein two or more of the plurality of data source applications each includes a data source display application that presents the entity data in different viewing formats (pg. 5, par. [0040] and pg. 11, par. [0069]; i.e. each of the different schemas from each data originator);

storing the collected entity data in a database associated with the primary data collection platform (pg. 5, par. [0041], pg. 8, par. [0054] and pg. 13, par. [0082]);

accessing the database (pg. 5, par. [0040]; i.e. via XML data server) from a remote site geographically separated from the primary data collection platform to obtain at least a portion of the entity data stored in the database (pg. 12, par. [0076] and pg. 13, par. [0083]);

displaying (pg. 6, par. [0042] and [0043]; i.e. via user display applications of Fig. 2, element 50) a navigational tree (pg. 14, par. [0088], pg. 15, par. [0095] and Fig. 5; i.e. a set or series of hierarchical displays) at the remote site (pg. 6, par. [0043], pg. 12, par. [0075] and pg. 20, par. [0124]), the navigational tree including a plurality of sections specifying categories of the entity data (pgs. 14-15, par. [0092]) in the database (pg. 14, par. [0094] and pg. 20, par. [0126]); and

displaying a display view (Fig. 5A and 5B) at the remote site in conjunction with the navigational tree (pg. 15, par. [0095] and Fig. 5; i.e. a set or series of hierarchical

displays), wherein the display view presents entity data in a predetermined viewing format (i.e. common manner/consistent format) in response to a selection of one of the sections of the navigational tree (pgs. 14-15, par. [0092] and [0094] and pg. 20, par. [0126] and [0127]), wherein the predetermined viewing format is a common display format for presenting entity data associated with each of the plurality of sections specifying different entity data to be displayed (pg. 11, par. [0069] and pg. 15, par. [0095] and par. [0096]).

18. As per claim 25, Nixon discloses accessing the database includes using a web server (i.e. XML data server) located at a second site geographically separated from the remote site (pg. 5, par. [0040]) to access the entity data stored in the database (pg. 12, par. [0076] and pg. 13, par. [0083]), placing the accessed entity data into a web page in the predetermined viewing format (pg. 13, par. [0084]) at the web server and sending the web page to the remote site (pg. 5, par. [0040] and pg. 20, par. [0125]).

19. As per claim 27, Nixon discloses displaying the navigational tree includes displaying a first section of the navigational tree that organizes the entity data based on one or more plant locations (Fig. 5A, element "Area 1" and "Area 2") within the process plant (pg. 6, par. [0044], pg. 14, par. [0088], pg. 15, par. [0096] and pg. 20, par. [0126]).

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20. As per claim 28, Nixon discloses displaying the display view at the remote site includes presenting entity data in the predetermined viewing format that organizes the entity data based on device tags (pg. 7, par. [0048] and Fig. 5A and 5B; i.e. indexes) in response to a selection of a section of the navigational tree (pgs. 14-15, par. [0088], [0092] and [0094] and pg. 20, par. [0126] and [0127]).

21. As per claim 30, Nixon discloses the entity data includes configuration data (i.e. the interconnections of process control equipment) associated with the device tags (pg. 20, par. [0126]).

22. As per claim 31, Nixon discloses the entity data includes calibration data (pg. 7, par. [0052]) associated with the device tags (pg. 20, par. [0126]).

23. As per claim 32, Nixon discloses displaying the navigational tree includes displaying a first section of the navigational tree that organizes the entity data based on one or more physical networks (Fig. 5A, element "Area 1" and "Area 2") associated with the process plant (pg. 6, par. [0044], pg. 15, par. [0088] and [0096], pg. 20, par. [0126]).

24. As per claim 33, Nixon discloses displaying the navigational tree includes displaying a first section of the navigational tree that organizes the entity data based on

alerts (Fig. 5) generated within the process plant (pg. 7, par. [0052], pg. 14, par. [0088], and pg. 15, element [0096]).

25. As per claim 34, Nixon discloses displaying the navigational tree includes displaying a section associated with active alerts and wherein displaying the display view (Fig. 5) includes presenting active alert entity data in a predetermined viewing format (pgs. 7-8, par. [0053]) in response to a selection of the section (pgs. 14-15, par. [0092] and [0094] and pg. 20, par. [0126] and [0127]) associated with the active alerts (pg. 7, par. [0052] and pg. 15, element [0096]).

26. As per claim 36, Nixon discloses displaying the navigational tree includes displaying a first section of the navigational tree that organizes the entity data based on calibration events (pg. 7, par. [0052]) within the process plant (pg. 20, par. [0126]).

27. As per claim 42, Nixon discloses displaying the navigational tree includes displaying a first section of the navigational tree associated with entity data organized by device tags (pg. 7, par. [0048], pg. 11, par. [0068], pg. 15, par. [0096] and [0098], pg. 20, par. [0126] and [0127] and Fig. 5A and 5B; i.e. indexes).

28. As per claim 43, Nixon discloses displaying the first section of the navigational tree includes one or more sub-sections (pg. 7, par. [0048] and pgs. 14-15, par. [0092];

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e.g. Fig. 5, element "Areas") associated with device tags (i.e. indexes) organized by one or more of all devices, assigned devices, spare devices and decommissioned devices (pg. 11, par. [0068], pg. 15, par. [0096] and [0098] and pg. 20, par. [0126] and [0127]).

***Claim Rejections - 35 USC § 103***

29. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

30. Claims 3, 16, 18, 29, 35 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nixon in view of U.S. Patent No. 6,889,096 (hereinafter Spriggs)

31. As per claim 3, Nixon teaches a viewing format includes a display of audit trail data (pg. 22, par. [0138]).

Nixon does not expressly teach the predetermined viewing format includes a display of audit trail data associated with the device tags.

Spriggs teaches to a display of audit trail data (col. 2, lines 52-59, col. 11, lines 47-57, col. 12, lines 20-22, col. 16, lines 52-55 and col. 33, lines 60-65) associated with the device tags (col. 33, lines 39-41).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify the teaching of Nixon to include a display of audit trail data associated with the device tags to provide an unified display environment enabling the user to view the enterprise as a whole and navigate to a specific point or parameter quickly and easily (col. 3, lines 49-56).

32. As per claim 16, Nixon teaches to audit trail events associated with the entity data within the process plant (pg. 22, par. [0138]).

Nixon does not expressly teach the navigational tree includes a section specifying audit trail events associated with the entity data within the process plant.

Spriggs teaches the navigational tree includes a section specifying audit trail events (col. 2, lines 52-59, col. 11, lines 47-57, col. 12, lines 20-22, col. 16, lines 52-55 and col. 33, lines 60-65) associated with the entity data within the process plant (col. 26, lines 45-57).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify the teaching of Nixon to include the navigational tree includes a section specifying audit trail events associated with the entity data within the process plant to provide an unified display environment enabling the user to view the enterprise as a whole and navigate to a specific point or parameter quickly and easily (col. 3, lines 49-56).



33. As per claim 18, Nixon does not expressly teach including an alert polling application which polls one or more devices within the process plant for alert information and which sends the alert information to the remote platform for presentation via the predetermined viewing format (pgs. 19-20, par. [0122]).

Spriggs teaches an alert polling application which polls one or more devices within the process plant for alert information (col. 12, lines 26-30) and which sends the alert information to the remote platform for presentation via the predetermined viewing format (col. 12, lines 30-34).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify the teaching of Nixon to include teaches an alert polling application which polls one or more devices within the process plant for alert information and which sends the alert information to the remote platform for presentation via the predetermined viewing format to provide an unified display environment enabling the user to view the enterprise as a whole and navigate to a specific point or parameter quickly and easily (col. 3, lines 49-56).

34. As per claim 29, Nixon teaches the entity data includes audit trail data (pg. 22, par. [0138]).

Nixon does not expressly teach the entity data includes audit trail data associated with the device tags.

Spriggs teach the entity data includes audit trail data (col. 2, lines 52-59, col. 11, lines 47-57, col. 12, lines 20-22, col. 16, lines 52-55 and col. 33, lines 60-65) associated with the device tags (col. 33, lines 39-41).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify the teaching of Nixon to include the entity data includes audit trail data associated with the device tags to provide an unified display environment enabling the user to view the enterprise as a whole and navigate to a specific point or parameter quickly and easily (col. 3, lines 49-56).

35. As per claim 35, Nixon does not expressly teach displaying the navigational tree includes displaying a first section associated with polling for alerts generated within the process plant, further including initiating an alert polling application that polls for alerts within the process plant in response to a selection of the first section of the navigational, tree and wherein displaying the display view includes presenting alert data obtained by the alert polling application in a predetermined viewing format in response to the selection of the first section of the navigational tree.

Spriggs teaches displaying the navigational tree includes displaying a first section associated with polling for alerts generated within the process plant (col. 12, lines 26-30), further including initiating an alert polling application that polls for alerts within the process plant in response to a selection of the first section of the navigational tree (col.

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13, lines 61-67 and 1-8) and wherein displaying the display view includes presenting alert data obtained by the alert polling application in a predetermined viewing format in response to the selection of the first section of the navigational tree (col. 13, lines 54-60).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify the teaching of Nixon to include displaying the navigational tree includes displaying a first section associated with polling for alerts generated within the process plant, further including initiating an alert polling application that polls for alerts within the process plant in response to a selection of the first section of the navigational, tree and wherein displaying the display view includes presenting alert data obtained by the alert polling application in a predetermined viewing format in response to the selection of the first section of the navigational tree to provide an unified display environment enabling the user to view the enterprise as a whole and navigate to a specific point or parameter quickly and easily (col. 3, lines 49-56).

36. As per claim 41, Nixon teaches displaying audit trail entity data (pg. 22, par. [0138]).

Nixon does not expressly teach the navigational tree includes displaying a first section of the navigational tree associated with audit trail entity data.

Spriggs teaches the navigational tree includes displaying a first section of the navigational tree (col. 5, lines 10-26, col. 8, lines 64-67 and col. 9, lines 1-2) associated with audit trail entity data (col. 2, lines 52-59, col. 11, lines 47-57, col. 12, lines 20-22, col. 16, lines 52-55 and col. 33, lines 60-65).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify the teaching of Nixon to the navigational tree includes displaying a first section of the navigational tree associated with audit trail entity data to provide an unified display environment enabling the user to view the enterprise as a whole and navigate to a specific point or parameter quickly and easily (col. 3, lines 49-56).

37. Claims 6, 11-14, 20, 21, 37-40 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nixon in view of U.S. Patent Publication No. 2003/0149608 (hereinafter Kall).

38. As per claim 6, Nixon does not expressly teach the calibration data includes a result of at least one calibration procedure.

Kall teaches the calibration data includes a result of at least one calibration procedure (pg. 9, par. [0165] and Fig. 32).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify the teaching of Nixon to include calibration data that includes a result of at least one calibration procedure to synchronize and coordinate activities across multiple manufacturing sites (pg. 1, par. [0003]).

39. As per claim 11, Nixon does not expressly teach the calibration entities include at least one calibration route defined within the process plant.

Kall teaches the calibration entities include at least one calibration route defined within the process plant (pg. 9, par. [0165] and Fig. 32).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify the teaching of Nixon to include the calibration entities include at least one calibration route defined within the process plant to synchronize and coordinate activities across multiple manufacturing sites (pg. 1, par. [0003]).

40. As per claim 12, Nixon does not expressly teach the calibration entities include calibration schedule information for at least one device within the process plant.

Kall teaches to calibration schedule information for at least one device within the process plant (pg. 9, par. [0165] and Fig. 32).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify the teaching of Nixon to include calibration schedule information for at least one device within the process plant to synchronize and coordinate activities across multiple manufacturing sites (pg. 1, par. [0003]).

41. As per claim 13, Nixon does not expressly teach the predetermined viewing format includes a search engine that enables searching for calibration schedule data based on a priority of a calibration procedure.

Kall teaches to a search engine that enables searching for calibration schedule data based on a priority of a calibration procedure (pg. 9, par. [0165]-[0166], Fig. 32 and Fig. 33, i.e. automatic sort).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify the teaching of Nixon to include a search engine that enables searching for calibration schedule data based on a priority of a calibration procedure to synchronize and coordinate activities across multiple manufacturing sites (pg. 1, par. [0003]).

42. As per claim 14, Nixon does not expressly teach the predetermined viewing format includes a search engine enabling searching for calibration schedule data based on a time or date associated with. a calibration procedure.

Kall teaches to a search engine enabling searching for calibration schedule data based on a time or date associated with a calibration procedure (pg. 9, par. [0165]-[0166], Fig. 32 and Fig. 33, i.e. automatic sort).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify the teaching of Nixon to include a search engine enabling searching for calibration schedule data based on a time or date associated with a calibration procedure to synchronize and coordinate activities across multiple manufacturing sites (pg. 1, par. [0003]).

43. As per claim 20, Nixon does not expressly teach a search engine that searches entity data in the database and presents the entity data located in the search according to the predetermined viewing format.

Kall teaches to a search engine that searches entity data in the database and presents the entity data located in the search according to the predetermined viewing format (pg. 9, par. [0165]-[0166], Fig. 32 and Fig. 33, i.e. automatic sort).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify the teaching of Nixon to include a search engine that searches entity data in the database and presents the entity data located in the search according to the predetermined viewing format to synchronize and coordinate activities across multiple manufacturing sites (pg. 1, par. [0003]).

44. As per claim 21, Nixon does not expressly teach the search engine includes a display field having search fields specifying parameters associated with the entity data.

Kall teaches to a search engine includes a display field having search fields specifying parameters associated with the entity data (pg. 9, par. [0165]-[0166], Fig. 32 and Fig. 33, i.e. automatic sort).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify the teaching of Nixon to include a search engine includes a display field having search fields specifying parameters associated with the entity data to synchronize and coordinate activities across multiple manufacturing sites (pg. 1, par. [0003]).

45. As per claim 37, Nixon does not expressly teach the calibration events include at least one calibration route defined within the process plant.

Kall teaches the calibration events include at least one calibration route defined within the process plant (pg. 9, par. [0165] and Fig. 32).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify the teaching of Nixon to include the calibration events include at least one calibration route defined within the process plant



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to synchronize and coordinate activities across multiple manufacturing sites (pg. 1, par. [0003]).

46. As per claim 38, Nixon does not expressly teach the calibration events include at least one calibration schedule defined within the process plant.

Kall teaches the calibration events include at least one calibration schedule defined within the process plant (pg. 9, par. [0165] and Fig. 32).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify the teaching of Spriggs to include the calibration events include at least one calibration schedule defined within the process plant to synchronize and coordinate activities across multiple manufacturing sites (pg. 1, par. [0003]).

47. As per claim 39, Nixon does not expressly teach displaying the display view includes providing a search engine enabling searching for calibration schedule data based on a priority of a calibration procedure.

Kall teaches a search engine enabling searching for calibration schedule data based on a priority of a calibration procedure (pg. 9, par. [0165]-[0166], Fig. 32 and Fig. 33, i.e. automatic sort).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify the teaching of Nixon to include a search engine enabling searching for calibration schedule data based on a priority of a calibration procedure to synchronize and coordinate activities across multiple manufacturing sites (pg. 1, par. [0003]).

48. As per claim 40, Nixon does not expressly teach displaying the display view includes providing a search engine enabling searching for calibration schedule data based on a time or a date associated with a calibration procedure.

Kall teaches to a search engine enabling searching for calibration schedule data based on a time or a date associated with a calibration procedure (pg. 9, par. [0165]-[0166], Fig. 32 and Fig. 33, i.e. automatic sort).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify the teaching of Nixon to include a search engine enabling searching for calibration schedule data based on a time or a date associated with a calibration procedure to synchronize and coordinate activities across multiple manufacturing sites (pg. 1, par. [0003]).

49. As per claim 44, Nixon teaches the remote site to enable a user at the remote site (pg. 5, par. [0039] and Fig. 1, element 40) to access to the entity data in the

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database (pg. 5, par. [0041], pg. 13, par. [0082], pg. 8, par. [0088] and Fig. 2, element 102) and to present (pg. 7, par. [0048]) the entity data according to the predetermined viewing format (pg. 7, par. [0048], pg. 11, par. [0069] and pg. 15, par. [0095] and [0096]).

Nixon does not expressly teach to a search engine view.

Kall teaches to a search engine view (pg. 9, par. [0165]-[0166], Fig. 32 and Fig. 33).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify the teaching of Spriggs to include a search engine view to synchronize and coordinate activities across multiple manufacturing sites (pg. 1, par. [0003]).

50. Claims 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nixon in view of hereinafter Latzel.

51. As per claim 26, Nixon does not expressly teach the second site is geographically separated from the primary data collection platform.

Latzel teaches to a second site is geographically separated from the primary data collection platform (pg. 4, par. [0051]).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify the teaching of Nixon to include a second site that is geographically separated from the primary data collection platform to conveniently edit and generate web sites, and provide simplified automated editing of web sites, requiring less technical expertise (pg. 1, par. [0006]).

### ***Response to Arguments***

52. Applicant's arguments, see Remarks pgs. 9-12, filed 28 April 2008 with respect to claims 1, 2, 4, 5, 7-10, 15, 17, 19, 22-25, 27, 28, 30-34, 36, 42 and 43 under 35 U.S.C. 102(a) have been fully considered but they are not persuasive.

53. Applicant argues that the prior art fails to teach, "... that different data source applications include data source display applications that presents the entity data in different viewing formats. Moreover, the cited portions of Nixon et al. do not disclose or suggest a display that then presents entity data in a common display format for each of a plurality of sections specifying the different entity data to be displayed." (see Remarks pg. 9, par. 4) The Examiner respectfully disagrees.

Nixon discloses (pg. 5, par. [0040]) "The data collection and distribution system mentioned above may also be provided in the computer 30 or may be dispersed at numerous locations throughout the process network 10 to acquire and process data from any source of data such as the controller systems 12 and 14, the monitoring systems 22 and 26, the financial systems 35, 36, etc. If the data collection and distribution

system is located in the computer 30, **it may receive data from the disparate sources of data, such as the controllers, equipment monitoring and financial applications separately using different data formats**, or using a common format. In one embodiment, the communications over the bus 32 occur using the XML protocol. Here, data from each of the computers 12A, 18, 14A, 22, 26, 35, 36, etc. is wrapped in an XML wrapper and is sent to an XML data server which may be located in, for example, the computer 30. Because XML is a descriptive language, the server can process any type of data. At the server, if necessary, the data is encapsulated and mapped to a new XML wrapper, i.e., this data is mapped from one XML schema to one or more other XML schemas which are created for each of the receiving applications. One method of providing this communication is described in co-pending U.S. application Ser. No. 09/902,201 filed Jul. 10, 2001, entitled "Transactional Data Communications for Process Control Systems" which is assigned to the assignee of this application and which is hereby expressly incorporated by reference herein. With this system, each data originator can wrap its data using a schema understood or convenient for that device or application, and each receiving application can receive the data in a different schema used for or understood by the receiving application. The server is configured to map one schema to another schema depending on the source and destination(s) of the data. If desired, the server may also perform certain data processing functions or other functions based on the receipt of data. The mapping and processing function rules are set up and stored in the server prior to operation of suite of data integration applications described herein. In this manner, data may be sent from any one application to one or more other applications."

(pg. 10, par. [0063]-[0064]) "As illustrated in FIG. 3, **financial data, in the form of financial constraint data and process operation constraint data including, for example, what products must be produced, the quality of the produced products, time deadlines, cost and supply constraints, pricing and valuation data of products made or sold, etc. may be collected at a functional block 239**. Generally speaking, although it is not necessary, the functional block 239 will include a computer running one or more data input applications that collects process performance data from the models 214, 228 and 232 and financially related data from persons associated with the process 10, such as managers, or from other sources. These financial applications may also generate this data. However, this financial data

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may come from many other sources instead or in addition to those listed here.

While the collection and processing of data as described above with respect to FIG. 3 is currently being performed in process control plants, generally speaking, the collected data, i.e., the process control data, **the process monitoring data, and the equipment monitoring data is provided to different people, is collected and used in different formats and is used by completely different applications for different purposes.** Thus, as explained above, some of this data may be **measured or developed by service organizations who use applications that are proprietary and not compatible with rest of the process control system.** Likewise, **data collected by or generated by financial applications typically used in a process control environment may not be in a format or protocol recognizable or useable by process control or alarming applications.** As a result, a maintenance person and the equipment monitoring and diagnostic applications that such a person uses do not typically have access to (and have not be constructed to use) data collected by or generated by any of the process control applications, process models or financial applications. Likewise, the process control operator and the process control monitoring and diagnostic applications used by that person do not generally have access to (and have not be constructed to use) data collected by or generated by the equipment monitoring applications and performance modeling or financial applications. Similarly, a business person may not have any access to data collected by or generated by either of the process control or equipment monitoring applications and, in fact, may have a whole different set of data on which to operate and make decisions about the operation of the plant 10. Likewise, much of the data measured by or generated in the functional blocks 206, 220, 230 and 239 is done so by service organizations who use proprietary applications and who generally do not make much of their data available for other uses.

(pg. 11, par. [0069]) "As illustrated in FIG. 3, the asset utilization suite 50 may include or use an integrated display application 244 (which may be any or all of the interface applications 58 of FIG. 1) that displays different data to any user in an integrated or common manner. Generally speaking, the display application 244 is configured to provide different information to any user, wherein the displayed information reflects or is based on two or more of the process control data 201, the equipment monitoring data 202 and the process performance data 203. The

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application 244 receives inputs from other applications within the suite 50 and **may enable a user to view the raw data 201, 202 and 203, may enable a user to go from screen to screen to view different parts or aspects of the plant 10 based on the raw data or processed data, may enable a user to view processed data, such as data generated by the equipment condition, process monitoring or performance monitoring applications 222, 208 and 231 the process models 214, the equipment or process diagnostic applications 224 and 210, or data generated by other applications within the asset utilization suite 50.**"

In summary, Nixon discloses different types of applications display information differently, i.e. charts/graphs for financial information, wherein control information can display any type of function icon to invoke other displays. Furthermore, Applicant's statement "Instead, Nixon et al. discloses presenting entity data associated with different levels in different formats and presenting entity data from the plurality of data sources in ***different formats*** depending on the particular application.", see Remarks pg. 12, paragraph 1, has acknowledged Nixon discloses Applicant's claimed limitation; and appears to contradict Applicant's argument "... that different data source applications include data source display applications that presents the entity data in different viewing formats. Moreover, the cited portions of Nixon et al. do not disclose or suggest a display that then presents entity data in a common display format for each of a plurality of sections specifying the different entity data to be displayed."

54. Applicant argues that the prior art fails to teach, "a common display format that presents entity data collected from a plurality of different data source applications

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having different display applications with different display formats." The Examiner respectfully disagrees.

Nixon discloses (pg. 10, par. [0063]) "To overcome the limitation of limited or no access to data from various external sources, **the data collection and distribution system 102 is provided to collect data, convert that data if necessary into a common format or protocol that can be accessed and used by applications within the asset utilization suite 50 illustrated in FIG. 3.** In this manner, the applications within **the asset utilization suite 50 receive the different types of data from the different functional areas or data sources including the process control functional area 206, the equipment monitoring functional area 220 and the performance monitoring functional area 230, and integrates this data in any of a number of ways to the direct benefit of the operation of the plant 10.** The goal of the asset utilization suite 50 may be to produce a better view of the plant 10, enable better understanding of the overall condition of the plant 10, and allow better decisions to be made regarding the control or use of the plant 10 or the assets of the plant 10 based on all of the data in the plant and, overall, to run the plant 10 more optimally. **The integration of the different types of functional data may provide or enable improved personnel safety, higher process and equipment uptime, avoidance of catastrophic process and/or equipment failures, greater operating availability (uptime) and plant productivity, higher product throughput stemming from higher availability and the ability to safely and securely run faster and closer to design and manufacturing warrantee limits, higher throughput stemming from the ability to operate the process at the environmental limits, and improved quality due to the elimination or minimization of equipment related process and product variations.** To the contrary, in the past, the different functional areas, e.g., the process monitoring, the equipment monitoring and the performance monitoring, were performed independently and each tried to "optimize" their associated functional area without regard to the effect that given actions might have on the other functional areas. As a result, for example, a low priority equipment problem may have been causing a large problem in achieving a desired or critical process control performance, but was not being corrected because it was not considered very important in the context of equipment maintenance. With the data collection and distribution system 102 providing data to the asset



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utilization suite 50, however, persons can have access to a view of the plant 10 based on two or more of equipment monitoring data, process performance data, and process control monitoring data. Similarly, diagnostics performed for the plant 10 may take into account data associated with process operation and the equipment operation and provide a better overall diagnostic analysis. Thus, applications within the asset utilization suite 50 may use the process control, equipment monitoring and process performance data to make better or more complete decisions that, while not being strictly optimal for one functional area, may optimize the overall plant operation in a way that the independent operation of the different functional areas does not allow."

(pg. 11, par. [0069]) "As illustrated in FIG. 3, **the asset utilization suite 50 may include or use an integrated display application 244 (which may be any or all of the interface applications 58 of FIG. 1) that displays different data to any user in an integrated or common manner.** Generally speaking, the display application 244 is configured to provide different information to any user, wherein the displayed information reflects or is based on two or more of the process control data 201, the equipment monitoring data 202 and the process performance data 203. The application 244 receives inputs from other applications within the suite 50 and may enable a user to view the raw data 201, 202 and 203, may enable a user to go from screen to screen to view different parts or aspects of the plant 10 based on the raw data or processed data, may enable a user to view processed data, such as data generated by the equipment condition, process monitoring or performance monitoring applications 222, 208 and 231 the process models 214, the equipment or process diagnostic applications 224 and 210, or data generated by other applications within the asset utilization suite 50."

In summary, Nixon discloses converting disparate sources of data into a common displaying format; hence, Nixon discloses Applicant's claimed limitation "a common display format that presents entity data collected from a plurality of different data source applications having different display applications with different display formats."

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55. Applicant argues that the prior art fails to teach, "display of both a navigational tree having sections specifying different categories of entity data and a display view, and ... different viewing formats of data sources or the common viewing format of the display application." The Examiner respectfully disagrees.

Nixon discloses (pg. 10, par. [0063]) "To overcome the limitation of limited or no access to data from various external sources, **the data collection and distribution system 102 is provided to collect data, convert that data if necessary into a common format or protocol that can be accessed and used by applications within the asset utilization suite 50 illustrated in FIG. 3.** In this manner, the applications within **the asset utilization suite 50 receive the different types of data from the different functional areas or data sources including the process control functional area 206, the equipment monitoring functional area 220 and the performance monitoring functional area 230, and integrates this data in any of a number of ways to the direct benefit of the operation of the plant 10.** The goal of the asset utilization suite 50 may be to produce a better view of the plant 10, enable better understanding of the overall condition of the plant 10, and allow better decisions to be made regarding the control or use of the plant 10 or the assets of the plant 10 based on all of the data in the plant and, overall, to run the plant 10 more optimally. **The integration of the different types of functional data may provide or enable improved personnel safety, higher process and equipment uptime, avoidance of catastrophic process and/or equipment failures, greater operating availability (uptime) and plant productivity, higher product throughput stemming from higher availability and the ability to safely and securely run faster and closer to design and manufacturing warrantee limits, higher throughput stemming from the ability to operate the process at the environmental limits, and improved quality due to the elimination or minimization of equipment related process and product variations.** To the contrary, in the past, the different functional areas, e.g., the process monitoring, the equipment monitoring and the performance monitoring, were performed independently and each tried to "optimize" their associated functional area without regard to the effect that given actions might have on the other functional areas. As a result, for example, a low priority equipment problem may have been causing a

large problem in achieving a desired or critical process control performance, but was not being corrected because it was not considered very important in the context of equipment maintenance. With the data collection and distribution system 102 providing data to the asset utilization suite 50, however, persons can have access to a view of the plant 10 based on two or more of equipment monitoring data, process performance data, and process control monitoring data. Similarly, diagnostics performed for the plant 10 may take into account data associated with process operation and the equipment operation and provide a better overall diagnostic analysis. Thus, applications within the asset utilization suite 50 may use the process control, equipment monitoring and process performance data to make better or more complete decisions that, while not being strictly optimal for one functional area, may optimize the overall plant operation in a way that the independent operation of the different functional areas does not allow."

(pg. 11, par. [0069]) "As illustrated in FIG. 3, **the asset utilization suite 50 may include or use an integrated display application 244 (which may be any or all of the interface applications 58 of FIG. 1) that displays different data to any user in an integrated or common manner.** Generally speaking, the display application 244 is configured to provide different information to any user, wherein the displayed information reflects or is based on two or more of the process control data 201, the equipment monitoring data 202 and the process performance data 203. The application 244 receives inputs from other applications within the suite 50 and may enable a user to view the raw data 201, 202 and 203, may enable a user to go from screen to screen to view different parts or aspects of the plant 10 based on the raw data or processed data, may enable a user to view processed data, such as data generated by the equipment condition, process monitoring or performance monitoring applications 222, 208 and 231 the process models 214, the equipment or process diagnostic applications 224 and 210, or data generated by other applications within the asset utilization suite 50."

(pg. 14, par. [0088]) FIG. 5 illustrates an example **display 350 generated by an explorer-type navigation tool which may be used to store, organize and access the data collected by the data collection and distribution system 102 as stored in the configuration database 322. The display or hierarchy 350 includes numerous different sections which can be used for different purposes. However, the hierarchy 350 represents an organization of, illustrates an overview of and provides access to**

**the data or other elements available to the system.** Thus, the hierarchy 350 is used to represent the data stored in the configuration database as well as to manipulate that data so as to change the configuration of the system in some manner. As can be seen, the example hierarchy of FIG. 4 includes a number of different sections including a "library" section, a "control strategies" section and a "network" section, each of which can be used for different purposes or to represent different data or different organizations of the data stored in or available to the configuration database.

(pg. 15, par. [0094]-[0096]) "Generally speaking, the configuration database is designed to store and allow manipulation of the modules illustrated in the control strategies sections. Other elements, either hardware or software elements, may be represented by a single module or by a combination of interconnected modules. Thus, when a user is manipulating the icons within the display 350, that user is actually manipulating modules within the configuration database or other databases or memories in which these modules are located.

To enable the collection and use of data from different data sources, the display or hierarchy 350 represents the different data sources as modules or combination of modules. Such modules can then be placed in the configuration hierarchy and can be manipulated in the same manner that modules associated with entities within the integrated system, such as process control modules, are manipulated in the configuration database. When creating a module for a previously unknown or unconnected data source, the user defines the type, nature or meaning of data to be received from that data source in the context of a module. Using this information construct, the data actually received from that data source can then be categorized, labeled, recognized and used within the integrated system in the same manner as data from other modules of elements within the integrated system. In this manner, **any type of data that is received from a disparate data source can be collected and stored, even if an organization or person completely unassociated with the integrated system has created the application or device that actually generates the data.** Of course it will be understood that the data from the data source is communicated to the configuration database after being converted by a data conversion technique, such as OPC, PI, Fieldbus, etc. As indicated above, this function is performed by the data collection and distribution system 102, not actually shown in the hierarchy 350 of FIG. 5. A more

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detailed description of a modules for the steam turbine is provided with respect to FIG. 6.

The **network section of the hierarchy 350 illustrates the physical and operational interconnections of the network.** Of course, there will generally be many different types of devices and elements associated with the network. However, one illustrated element is an ACN (Area Control Node) which includes a controller node. The controller node, in turn, has control strategies, such as control and communication software stored therein. The ACN also includes one or more input/output (I/O) devices which may be Fieldbus I/O devices, HART I/O devices, etc. Of course each I/O device may have different ports, devices, function blocks, etc. connected thereto or communicatively tied to the I/O device. One or more workstations may also be associated with the ACN. These workstations may be user interfaces or other types of workstations. The workstation illustrated in FIG. 5 supports or implements numerous applications or other functional elements including, in this example, alarms and alerts processing or display applications and control strategy applications, such as those which are used to configure the controller, field devices, etc., to get information about the controller and field devices."

In summary, Nixon discloses converting disparate sources of data into a common displaying format which can be displayed in a navigational hierarchical tree structure with different sections (Fig. 5, element 350), hence Nixon discloses Applicant's claimed limitation "display of both a navigational tree having sections specifying different categories of entity data and a display view, and ... different viewing formats of data sources or the common viewing format of the display application."

56. Applicant's arguments, see Remarks pgs. 12-13, filed 28 April 2008 with respect to claims 3, 6, 11-14, 16, 18-22, 26, 29, 35, 37-40, 41 and 44 under 35 U.S.C. 103(a) have been fully considered but they are not persuasive.

57. In regards to Applicant's arguments, that the prior art fails to teach the claimed limitations of claims 1, 2, 4, 5, 7-10, 15, 17, 19, 22-25, 27, 28, 30-34, 36, 42 and 43; hence the prior art fails to teach the limitations of claims 3, 6, 11-14, 16, 18-22, 26, 29, 35, 37-40, 41 and 44 the Examiner refers to the above response, pgs. paragraph of this Office action, and the argument herein as addressed.

58. The rejection of claims 3, 6, 11-14, 16, 18-22, 26, 29, 35, 37-40, 41 and 44 under 35 U.S.C. 103(a) stand rejected as set forth above.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer L. Norton whose telephone number is (571)272-3694. The examiner can normally be reached on 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert Decady can be reached on 571-272-3819. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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